AMENDED CLAIMS
[received by the International Bureau on 27 June 1994 (27.06.94); new claims 40-43 added (1 page)]

functional disturbances in levels of anticoagulant activity of Factor V as cofactor to APC.

38. Factor V, suitably human Factor V, capable of becoming activated to exert Factor V_a procoagulant activity but not capable of exerting anticoagulant activity, preferentially not anticoagulant activity as a cofactor to APC, said factor being in a substantially pure form.

39. Factor V, suitably human Factor V, capable of exerting anticoagulant activity, preferentially as a cofactor to APC, but not capable of expressing procoagulant activity of Factor V_a.

40. Method to determine for an individual a predisposition to develop thrombosis due to inherited APC-resistance caused by gene mutation(s), said method comprising determining for a cell sample from said individual occurence of Factor V gene mutation(s), which mutation(s) is (are) located in one or more nucleic acid fragment(s) and/or sequences of the Factor V gene, said mutations giving rise to expression of a mutated Factor V/Va molecule, which is associated with expression of APC-resistance and, thus, predisposition to develop thrombosis.

41. Method of claim 40, wherein the said mutation(s) is (are) determined as an abnormal absence or presence of nucleic acid fragment(s) and/or sequence(s) in the Factor V gene caused by the said mutation(s), current methods, such as methods based on nucleic acid hybridization assays, nucleic acid sequencing, or immunoassays, being used.

42. Method of claim 40, wherein the said mutation(s) is (are) determined indirectly based on linkage thereof to a neutral polymorphism in the Factor V gene.

43. A method for determining in a sample, preferably a blood or blood derived sample, such as plasma, the level of a blood component expressing anticoagulant activity, wherein said blood component is comprised of Factor V and Factor V is determined with an immunological method.